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(54) Title: IDENTIFICATION OF SPECIFIC DIFFERENTIALLY EXPRESSED MYCOBACTERIAL ANTIGENS

(57) Abstract: The present invention relates to compositions useful in immunization against pathogenic organisms of the genus *Mycobacterium* and for diagnostic purposes. In particular, the present invention relates to a composition comprising at least one protein which is differentially expressed in a virulent strain as compared to an avirulent strain of *Mycobacteria*. Furthermore, the invention relates to compositions comprising fusion proteins, antigenic fragments, nucleic acid molecules encoding the aforementioned proteinaceous compounds and/or antibodies thereto. Additionally, the invention relates to pharmaceutical and diagnostic compositions comprising or employing compounds of the invention. In addition, the present invention relates to the use of the compounds of the invention for the treatment of *Mycobacterium* induced diseases and/or for the preparation of a vaccine for vaccination against *Mycobacterium* induced diseases.

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A. CLASSIFICATION OF SUBJECT MATTER

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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

MEDLINE, BIOSIS, WPI Data, EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>DATABASE BIOSIS 'Online! BIOSCIENCES INFORMATION SERVICE, PHILADELPHIA, PA, US; May 1998 (1998-05) AMARA RAMA RAO ET AL: "Characterization of novel immunodominant antigens of Mycobacterium tuberculosis." Database accession no. PREV199800303509 XP002146135 abstract & MICROBIOLOGY (READING), vol. 144, no. 5, May 1998 (1998-05), pages 1197-1203, ISSN: 1350-0872</p> <p style="text-align: center;">--- -/--</p>	<p>1-3, 6-8, 14-17, 20</p>

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INTERNATIO SEARCH REPORT

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>URQUHART BROOKE L ET AL: "'Proteomic contigs' of Mycobacterium tuberculosis and Mycobacterium bovis (BCG) using novel immobilised pH gradients." ELECTROPHORESIS, vol. 18, no. 8, 1997, pages 1384-1392, XP000938853 ISSN: 0173-0835 abstract page 1385, right-hand column, paragraph 1 page 1391, left-hand column, paragraph 1</p>	1-8, 16, 17
X	<p>KUMAR D ET AL.: "Identification of a 25-kilodalton protein of Mycobacterium bovis BCG to distinguish BCG strains from Mycobacterium tuberculosis" JOURNAL OF CLINICAL MICROBIOLOGY, (1996 JAN) 34 (1) 224-6 , XP002146161 the whole document</p>	1-8, 14-17, 20
X	<p>PATENT ABSTRACTS OF JAPAN vol. 013, no. 589 (C-670), 25 December 1989 (1989-12-25) & JP 01 247094 A (AJINOMOTO CO INC; OTHERS: 01), 2 October 1989 (1989-10-02) abstract</p>	1-3, 6-8, 14-17, 20
A	<p>BROSCH ET AL: "USE OF A MYCOBACTERIUM TUBERCULOSIS H37RV BACTERIAL ARTIFICIAL CHROMOSOME LIBRARY FOR GENOME MAPPING, SEQUENCING, AND COMPARATIVE GENOMICS" INFECTION AND IMMUNITY, US, AMERICAN SOCIETY FOR MICROBIOLOGY, WASHINGTON, vol. 66, May 1998 (1998-05), pages 2221-2229, XP002104659 ISSN: 0019-9567 abstract page 2228, right-hand column, paragraph 2</p>	1-26
A	<p>FR 2 752 425 A (PASTEUR INSTITUT) 20 February 1998 (1998-02-20) page 5, line 22 -page 6, line 6 claims</p>	1-26
	<p>--- -/--</p>	

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	<p>JUNGBLUT P R ET AL: "Comparative proteome analysis of Mycobacterium tuberculosis and Mycobacterium bovis BCG strains: Towards functional genomics of microbial pathogens." MOLECULAR MICROBIOLOGY, vol. 33, no. 6, 1999, pages 1103-1117, XP000938898 ISSN: 0950-382X abstract page 1114, right-hand column, paragraph 3 page 1115, left-hand column, paragraphs 1,2</p> <p style="text-align: center;">-----</p>	1-26

INTERNATIONAL SEARCH REPORT

Information on patent family members

Int. Application No.

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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		EP 0918854 A	02-06-1999
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